

Notice of Allowability**Application No.**

09/992,155

Applicant(s)

TABARES ET AL.

Examiner

DIEM K. CAO

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERIT IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Reply Brief filed 2/29/2008 and Interview on 2/17/2009.
2. ☒ The allowed claim(s) is/are 1,3-12,14,15,20,22-31,33,34,39,41-50,52,53, now renumbered 1-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20090306.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Scott Moore (Reg. No. 42,011) on 2/17/2009.

2. The application has been amended as follows:

Claim 1 (Currently Amended) A computer implemented method of instantiating a device driver, comprising:

defining a plurality of device parameters;

declaring a parameter base class that defines the plurality of the device

parameters;

associating at least one of the plurality of device parameters with a service;

instantiating a service-specific sub-class to create a service-specific sub-class object;

instantiating the parameter base class to create a parameter base class object;

communicating the at least one of the plurality of device parameters associated with the service to the device driver; and

dynamically associating a first software component with the device driver at run-time, the first software component containing information that facilitates communication with devices of a specific device type.

Claim 2 Canceled.

Claim 3 (Currently Amended) A method as recited in Claim 1, ~~wherein defining the plurality of device parameter comprises:~~

~~declaring a parameter base class that defines the plurality of device parameters;~~

~~wherein associating the at least one of the plurality of device parameters with the service comprises:~~

~~deriving a the service-specific sub-class from the base class that defines the at least one of the plurality of device parameters that are associated with the service;~~

~~wherein the method further comprises:~~

~~instantiating a service-specific sub-class to create a service-specific sub-class object; and~~

~~instantiating the parameter base class to create a parameter base class object.~~

Claim 5 (Currently Amended) A method as recited in Claim 1, further comprising:

~~defining a plurality of common device parameters;~~

~~defining a plurality of service-specific device parameters;~~

associating the ~~common~~ device parameters with the service-specific device parameters; and

communicating the ~~common~~ device parameters with the service-specific device parameters to the device driver.

Claim 6 (Currently Amended) A method as recited in Claim 5, ~~wherein defining the plurality of common device parameters comprises:~~

~~declaring a parameter base class that defines the plurality of common device parameters;~~

~~wherein defining the plurality of service-specific device parameters comprises:~~

~~providing a second software component that comprises one of a script file and an extensible markup language (XML) file; and~~

~~wherein the method further comprises:~~

~~instantiating the parameter base class to create a parameter base class object.~~

Claim 7 (Currently Amended) A method as recited in Claim 6, wherein associating the ~~common~~ device parameters with the service-specific device parameters comprises:

dynamically loading the parameter base class object with the second software component at run time.

Claim 8 (Currently Amended) A method as recited in Claim 7, wherein communicating the ~~common~~ device parameters and the service-specific device parameters to the device driver comprises:

passing the ~~common~~ device parameters and the service-specific device parameters from the parameter base class object to the device driver after loading the parameter base class object with the second software component at run time.

Claim 12 (Currently Amended) A computer implemented method of collecting data from a device, comprising:

defining a plurality of device parameters;

declaring a parameter base class that defines the plurality of the device parameters;

associating at least one of the plurality of device parameters with a service;

instantiating a service-specific sub-class to create a service-specific sub-class object;

instantiating the parameter base class to create a parameter base class object;

communicating the at least one of the plurality of device parameters associated with the service to a device driver;

receiving a request to collect data from the device;

dynamically associating a software component with a the device driver at run-time, the software component containing information that facilitates communication with the device; and

retrieving data associated with the at least one device parameter from the device using the device driver.

Claim 13 Canceled.

Claim 20 (Currently Amended) A system for instantiating a device driver, comprising:

means for defining a plurality of device parameters;

means for declaring a parameter base class that defines the plurality of the device parameters;

means for associating at least one of the plurality of device parameters with a service;

means for instantiating a service-specific sub-class to create a service-specific sub-class object;

means for instantiating the parameter base class to create a parameter base class object;

means for communicating the at least one of the plurality of device parameters associated with the service to the device driver; and

means for dynamically associating a first software component with the device driver at run-time, the first software component containing information that facilitates communication with devices of a specific device type.

Claim 21 Canceled.

Claim 22 (Currently Amended) A system as recited in Claim 20, ~~wherein the means for defining the plurality of device parameter comprises:~~

~~means for declaring a parameter base class that defines the plurality of device parameters;~~

wherein the means for associating the at least one of the plurality of device parameters with the service comprises:

means for deriving a the service-specific sub-class from the base class that defines the at least one of the plurality of device parameters that are associated with the service;

~~wherein the system further comprises:~~

~~means for instantiating a service-specific sub-class to create a service-specific sub-class object; and~~

~~means for instantiating the parameter base class to create a parameter base class object.~~

Claim 24 (Currently Amended) A system as recited in Claim 20, further comprising:

~~means for defining a plurality of common device parameters;~~

means for defining a plurality of service-specific device parameters;

means for associating the ~~common~~ device parameters with the service-specific device parameters; and

means for communicating the ~~common~~ device parameters with the service-specific device parameters to the device driver.

Claim 25 (Currently Amended) A system as recited in Claim 24, ~~wherein the means for defining the plurality of common device parameters comprises:~~

~~means for declaring a parameter base class that defines the plurality of common device parameters;~~

wherein the means for defining the plurality of service-specific device parameters comprises:

means for providing a second software component that comprises one of a script file and an extensible markup language (XML) file; ~~and~~

~~wherein the system further comprises:~~

~~means for instantiating the parameter base class to create a parameter base class object.~~

Claim 26 (Currently Amended) A system as recited in Claim 25, wherein the means for associating the ~~common~~ device parameters with the service-specific device parameters comprises:

means for dynamically loading the parameter base class object with the second software component at run time.

Claim 27 (Currently Amended) A system as recited in Claim 26, wherein the means for communicating the ~~common~~ device parameters and the service-specific device parameters to the device driver comprises:

means for passing the ~~common~~ device parameters and the service-specific device parameters from the parameter base class object to the device driver after loading the parameter base class object with the second software component at run time.

Claim 31 (Currently Amended) A system for collecting data from a device, comprising:

means for defining a plurality of device parameters;

means for declaring a parameter base class that defines the plurality of the device parameters;

means for associating at least one of the plurality of device parameters with a service;

means for instantiating a service-specific sub-class to create a service-specific sub-class object;

means for instantiating the parameter base class to create a parameter base class object;

means for communicating the at least one of the plurality of device parameters associated with the service to a device driver;

means for receiving a request to collect data from the device;

means for dynamically associating a software component with a the device driver at run-time, the software component containing information that facilitates communication with the device; and

means for retrieving data associated with the at least one device parameter from the device using the device driver.

Claim 32 Canceled

Claim 39 (Currently Amended) A computer program product for instantiating a device driver, comprising:

a computer readable storage medium having computer readable program code embodied therein, the computer readable program code comprising:

computer readable program code for defining a plurality of device parameters;

computer readable program code for declaring a parameter base class that defines the plurality of the device parameters;

computer readable program code for associating at least one of the plurality of device parameters with a service;

computer readable program code for instantiating a service-specific sub-class to create a service-specific sub-class object;

computer readable program code for instantiating the parameter base class to create a parameter base class object;

computer readable program code for communicating the at least one of the plurality of device parameters associated with the service to the device driver; and

computer readable program code for dynamically associating a first software component with the device driver at run-time, the first software component containing information that facilitates communication with devices of a specific device type.

Claim 40 Canceled.

Claim 41 (Currently Amended) A computer program product as recited in Claim ~~39, 40, wherein the computer readable program code defining the plurality of device parameter comprises:~~

~~computer readable program code for declaring a parameter base class that defines the plurality of device parameters;~~

wherein the computer readable program code for associating the at least one of the plurality of device parameters with the service comprises:

computer readable program code for deriving a the service-specific sub-class from the base class that defines the at least one of the plurality of device parameters that are associated with the service;

~~wherein the computer program product further comprises:~~

~~computer readable program code for instantiating a service-specific sub-class to create a service-specific sub-class object; and~~

~~computer readable program code for instantiating the parameter base class to create a parameter base class object.~~

Claim 43 (Currently Amended) A computer program product as recited in Claim 39, further comprising:

~~computer readable program code for defining a plurality of common device parameters;~~

computer readable program code for defining a plurality of service-specific device parameters;

computer readable program code for associating the ~~common~~ device parameters with the service-specific device parameters; and

computer readable program code for communicating the ~~common~~ device parameters with the service-specific device parameters to the device driver.

Claim 44 (Currently Amended) A computer program product as recited in Claim 43, wherein the ~~computer readable program code for defining the plurality of common device parameters comprises:~~

~~computer readable program code for declaring a parameter base class that defines the plurality of common device parameters;~~

wherein the computer readable program code for defining the plurality of service-specific device parameters comprises:

computer readable program code for providing a second software component that comprises one of a script file and an extensible markup language (XML) file; ~~and wherein the computer program product further comprises:~~
~~computer readable program code for instantiating the parameter base class to create a parameter base class object.~~

Claim 45 (Currently Amended) A computer program product as recited in Claim 44, wherein the computer readable program code for associating the ~~common~~ device parameters with the service-specific device parameters comprises:

computer readable program code for dynamically loading the parameter base class object with the second software component at run time.

Claim 46 (Currently Amended) A computer program product as recited in Claim 45, wherein the computer readable program code for communicating the ~~common~~ device parameters and the service-specific device parameters to the device driver comprises:

computer readable program code for passing the ~~common~~ device parameters and the service-specific device parameters from the parameter base class object to the device driver after loading the parameter base class object with the second software component at run time.

Claim 50 (Currently Amended) A computer program product for collecting data from a device, comprising:

a computer readable storage medium having computer readable program code embodied therein, the computer readable program code comprising:

computer readable program code for defining a plurality of device parameters;

computer readable program code for declaring a parameter base class that defines the plurality of the device parameters;

computer readable program code for associating at least one of the plurality of device parameters with a service;

computer readable program code for instantiating a service-specific sub-class to create a service-specific sub-class object;

computer readable program code for instantiating the parameter base class to create a parameter base class object;

computer readable program code for communicating the at least one of the plurality of device parameters associated with the service to a device driver;

computer readable program code for receiving a request to collect data from the device;

computer readable program code for dynamically associating a software component with a the device driver at run-time, the software component containing information that facilitates communication with the device; and

computer readable program code for retrieving data associated with the at least one device parameter from the device using the device driver.

Claim 51 Canceled

3. The drawings filed 11/5/2001 are acceptable.

4. Claims 20-34 have been rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. The rejection is withdrawn in response to Applicant's arguments submitted on 10/30/2007 (see Brief, page 6, lines 5-17). Based on Applicant's arguments, claims 20-34 are interpreted as including both software and hardware.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEM K. CAO whose telephone number is (571)272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC
March 19, 2009

/Li B. Zhen/
Primary Examiner, Art Unit 2194